Characteristics of Preterm and Low Birth Weight Neonatal Deaths in Selected Health Facilities in Migori County, Kenya.

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Background

Preterm births and low birth weight babies contribute to approximately 75\% of neonatal mortality. While infant and under five mortality rates are decreasing, the neonatal mortality rate indicates little reduction. We aim to describe characteristics of preterm babies and low birth weight babies who died within the neonatal period in selected health facilities in Migori County Kenya.

Methods

This was a retrospective cohort study on all deaths that occurred among preterm and low birth weight babies from June 2016 to December 2017. Data was collected from maternity registers and follow up data in 17 health facilities participating in the Preterm Birth initiative study in Migori County. Descriptive analysis was conducted. We included infants born <37 weeks gestational age and babies with weight less than 2500 grams.

Results

We recorded 17645 live births from June 2016 to December 2017. The prevalence of preterm deliveries was 2080 (11.8\%). There were 134 deaths from preterm and low birth weight babies. Early neonatal mortality rate was almost 4 times that of late neonatal mortality (5.3 and 1.5 per 1000 live births respectively. The preterm deaths were subcategorized as early preterm 19 (19.8\%) moderately preterm 30 (31.2\%) and 47 (49.0\%) late preterm. Among these preterm babies 82 (85.4\%) were low birth weight babies median weight 1500 (1000, 1800) grams. 18 babies were low birth weight but term median weight 1500 (1000, 2000) grams.

Conclusion

The neonatal mortality rates are concentrated within the early neonatal period with almost half of the deaths occurring among the late preterm. Prompt identification of causes of these deaths is needed to design interventions that aim at increasing the survival of the preterm and low birth weight infants in Migori County.